

WHAT IS CLAIMED IS:

1. A ring-shaped part washing method, comprising the steps of:

disposing a ring-shaped parts in a washing tank filled with a washing fluid, said ring-shaped parts being disposed inclinedly with respect to a ultrasonic vibration plate disposed in said washing tank in such a manner that axes of said ring-shaped parts intersect with a plate surface of said ultrasonic vibration plate at an angle other than a right angle; and,

applying ultrasonic waves generated by said ultrasonic vibration plate, to thereby remove foreign substances adhering to said ring-shaped parts therefrom.

2. The ring-shaped part washing method according to claim 1, wherein said angle is set to be 30 - 60°.

3. The ring-shaped part washing method according to claim 1, wherein said angle is set to be the combination of 30 - 60° and 120 - 150°.

4. The ring-shaped part washing method according to claim 1, further comprising:

inserting a linear support member having a plurality of notches for inclinedly supporting said ring-shaped parts

into inner peripheries of said ring-shaped parts while facing said notches downward, to thereby hang down said ring-shaped parts from said support member; and

rotating said support member by 180° to face said notches upward, whereby upper portions of the inner peripheries of said ring-shaped are put into said notches so that all of said ring-shaped parts are inclinedly supported on said support member at the same time.

5. A ring-shaped parts washing apparatus, comprising:

a washing tank for filling a washing fluid;

an ultrasonic vibration plate disposed in said washing tank;

a washing jig including a longitudinal member for supporting said ring-shaped parts thereon, said washing jig being disposed in said washing tank so that a longitudinal direction thereof is maintained horizontally, said longitudinal member having a plurality of notches at given intervals along the longitudinal direction thereof, for inclinedly placing said ring-shaped parts thereon in such a manner that axes of said ring-shaped parts intersect with a plate surface of said ultrasonic vibration plate at an angle other than a right angle.

6. The ring-shaped part washing apparatus according to claim 5, wherein said angle of said notches is set to be 30 - 60°.

5 7. The ring-shaped parts washing apparatus according to claim 5, wherein said washing jig includes two ends being disposed on said washing tank in such a manner that the longitudinal direction of said longitudinal member is maintained horizontally.

8. The ring-shaped parts washing apparatus according to claim 7, wherein said longitudinal member comprises a pair of parallel long plates erectly disposed so that plate surfaces thereof form vertical surfaces, and said notches are formed in the upper edges of said parallel long plates such that outer peripheries of lower portions of said ring-shaped parts are inclinedly disposed thereon.

20 9. The ring-shaped parts washing apparatus according to claim 7, wherein said longitudinal member comprises a round rod having a circular section, and said notches are formed in an upper portion of an outer periphery of said round rod such that inner peripheries of upper  
25 portions of said ring-shaped parts are hung down thereon,

whereby said ring-shaped parts are inclinedly disposed on said washing jig.

10. The ring-shaped parts washing apparatus according to claim 7, wherein said longitudinal member comprises a long plate erectly disposed such that plate surfaces thereof form vertical surfaces, and said notches are formed in upper edges of said long plate such that inner peripheries of upper portions of said ring-shaped parts are hung down thereon, whereby said ring-shaped parts are inclinedly disposed on said washing jig.

11. The ring-shaped parts washing apparatus according to claim 10, wherein said notches respectively includes stoppers defining inclined surfaces in contact with outer peripheries of upper portions of said ring-shaped parts.

12. A ring-shaped parts washing apparatus, comprising:

a washing tank for filling with a washing fluid;

an ultrasonic vibration plate disposed in said washing tank;

a washing jig including a basket made of one of mesh and punching material, for storing said ring-shaped parts

therein, said basket having a plurality of saw-blade-shaped recessed portions in the bottom portion of said basket at given intervals along the longitudinal direction thereof, for inclinedly placing said ring-shaped parts thereon in such a manner that axes of said ring-shaped parts intersect with a plate surface of said ultrasonic vibration plate at an angle other than a right angle.

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